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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference BPCL 9818	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/02347	International filing date (day/month/year) 29.05.2003	Priority date (day/month/year) 12.06.2002
International Patent Classification (IPC) or both national classification and IPC C07C51/12		
Applicant BP CHEMICALS LIMITED		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 22.12.2003	Date of completion of this report 07.07.2004	
Name and mailing address of the International preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Bedel, C Telephone No. +49 89 2399-2506 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB 03/02347

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-22 as originally filed

Claims, Numbers

1-20 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	
	No: Claims	1-19
Inventive step (IS)	Yes: Claims	
	No: Claims	1-19
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations

see separate sheet

D1: EP-A-0849248 (cited in application)

D2: EP-A-0849250

D1 discloses a process for making acetic acid from methanol and carbon monoxide in the presence of an iridium catalyst, methyl iodide, water, acetic acid, methyl acetate, and one promoter (ruthenium) as well as a co-promoter which is an alkali metal iodide (see claim 11, Lil, see claim 12) or any metal complex capable of generating an iodide (see claim 13). The molar ratio of co-promoter to iridium (called lithium/iridium ratio in claim 19 but the lithium is always added with iodide as counter anion see claim 12 and examples) is from [0,5 to 1,5]:1, while the molar ratio Ru/Ir is from [0.5 to 15]:1, preferably [2 to 7.5]:1 (see p.3, l.58). The Ru/Ir molar ratio is 2:1 in the examples, however, D1 teaches clearly that a higher Ru/Ir ratio is conceivable (see p.3, last paragraph and claim 10).

A skilled person would have worked in the range above 2:1 because nothing in D1 teaches away from this solution. Furthermore, D2 teaches clearly that a Ru/Ir molar ratio above 2:1 can enhance the carbonylation rate (see D2 p.7 in table, compare the Ru/Ir molar ratio and the carbonylation rate of ex.3-5 with data of ex.1-2).

Therefore claim 1 cannot be considered as novel nor inventive over D1 alone and in combination with D2.

The technical features of dependant claims 2-20 can be derived from the prior art D1 and/or D2 and therefore they can not serve as a basis for assessing inventive step (Art.56 EPC).

Further remarks :

On page 2, a document of the prior art is wrongly cited ("WO-A-96/237757"), it should read WO-A-96/23757.